

Interplanetary Lyman- $\alpha$  Observations with the Galileo Ultraviolet Spectrometer: Solar Wind Latitude Variations and Multiple Scattering at Solar Maximum

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The Galileo Ultraviolet Spectrometer obtained a Lyman- $\alpha$  celestial sphere map on 13, 14 Dec 1990 near the first Earth encounter, with the spacecraft near the interstellar wind downwind axis. The data show solar flux longitudinal and latitudinal asymmetries which are modelled with He 10830  $\text{\AA}$  solar images. The difference between the observed brightness and a single scattering model is attributed to multiple scattering effects; which we also directly calculate. The data constrain the solar wind flux latitude variation at solar maximum. Other 1990-1992 Galileo Lyman- $\alpha$  data will be discussed.

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